PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
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CHINA PATENT AGENT(H.K.) LTD

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43 *bis*.1)

Date of mailing (*day/month/year*)	07 SEP 2006 (07.09.2006)
Applicant's or agent's file reference	FPEL05150060
FOR FURTHER ACTION	see paragraph 2 below

International application No.	International filing date (*day/month/year*)	Priority date (*day/month/year*)
PCT/CN2005/001961	18. Nov 2005 (18.11.2005)	

International Patent Classification (IPC) or both national classification and IPC
G06F9/445(2006.01)i

Applicant
INTEL CORPORATION et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No.II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i)with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No.VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No.VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/CN	Date of completion of this opinion	Authorized officer
The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088	16.Aug 2006 (16.08.2006)	ZHAO,Weihua 华赵印伟
Facsimile No. 86-10-62019451		Telephone No. (86-10)62085024

Form PCT/ISA/237(cover sheet)(April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2005/001961

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed
   ☐ a translation of the international application into _____ , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of :

   a. type of material
      ☐ a sequence listing
      ☐ table(s) related to the sequence listing

   b. format of material
      ☐ on paper
      ☐ in electronic form

   c. time of filing/furnishing
      ☐ contained in the international application as filed
      ☐ filed together with the international application in electronic form
      ☐ furnished subsequently to this Authority for the purposes of search

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2005/001961

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement:

Novelty (N)	Claims	1-20	YES
	Claims		NO
Inventive step (IS)	Claims	1-20	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

2. Citations and explanations

(1) Reference is made to the following documents:

D1:CN,A,1163006 (INTEL CORPORATION) 22,Oct 1997

D2:WO,A1,9427234 ((TALI-N) TALIGENT INC) 24,Nov 1994

D3:US,A,5280627 ((DIGI) NIPPON DIGITAL EQUIP KK et al) 18,Jan 1994

D4:EP,B1,0654733 ((HEWP) HEWLETT-PACKARD CO) 24,May 2000

(2) The subject matter of claims 1-20 of the present invention is a technique for operating media divices in pre-OS environment.

(3) D1 discloses an apparatus. It includes a storage device for storing a set of values. An interface logic (310) drives the set of values onto a bus. A second storage device stores the set of values. The system further includes a register for determining when the interface logic drives the set of values onto the bus and when the second storage device stores the retrieved set of values from the bus. The interface logic stores the retrieved set of values in the second storage device when driving the set of values onto the bus. The apparatus. uses a set of values to define operating parameters. The first and second storage devices comprise a second and a third register respectively.

D2 discloses a computer system. It comprises a memory (14, 16) and a display (38) with a clock object with an associated current time resident in the storage and displayable on the display. Multiple multimedia objects are resident in the memory and are displayable also on the display. A processor is provided for synchronizing at least one of the multimedia objects with the clock object. The processor also has an arrangement for initiating the synchronizing through an iconic operation. The arrangement comprises a double clicking on the clock object. The processor may also drop-launch the synchronizing. An external circuit obtains the current time which can be forced to proceed backwards. The clock object can span multiple address spaces.

D3 discloses a system. In order to initialize a computer (10) which does not include a local boot device, a minimum boot program is loaded from a host computer (14) connected to the first computer by a communications system (12). The mode being booted firstly broadcasts a boot request message over the communications system. A host computer determines that it is responsible for this function and down-loads a minimum boot control program.

D4 discloses a system. The processing unit includes an ability to operate on half words. The processor provides normal operations for data of its normal length. Additionally, the processor can operate on half length words in parallel. Each functional unit of the processor e.g. a multiplier, a shifter and an adder, is partitioned. One portion (41) operates on the low order bits of data words and accepts two low order bit operators (42,43) to produce an output (44).

(4) Claim 1-20 meet the criterias set out in PCT Article 33(2)-(4). Because present invention is a technique for initializing a plurality of media devices in communication with a computing device;mapping information corresponding to each initialized media device to a plurality of memory location of the computing device;and operating the initialized media devices based on the mapped information corresponding to each operated media while the computing device is in a pre-OS environment. It is obvious that not all the technical features in claims 1-20 are disclosed by D1~D4, and further the technical solutions claimed are not obvious to a person skilled on the basis of D1~D4 or their combinations. Thus, claims 1-20 have novelty under PCT Article 33(2), and have inventive step under PCT Article 33(3) ; Claims 1-20 have industrial applicability under PCT Article 33(4), because the subject matter of the present invention is a technique for operating media divices in pre-OS environment.